

Executive Summary

Florence Copper, Inc. (Florence Copper) has constructed the Production Test Facility (PTF) to demonstrate In-Situ Copper Recovery at the Florence Copper Project site in Florence, Arizona. This PTF Pre-Operational Report summarizes the details of the pre-operational requirements required under the site permits including the United States Environmental Protection Agency (USEPA) Underground Injection Control Permit No. R9-AZ3-FY11-1 (UIC Permit) and the Arizona Department of Environmental Quality (ADEQ) Temporary Aquifer Protection Permit (APP) No. 106360.

Formation testing completed at the site conformed to requirements of both the UIC Permit and the APP. Results of the testing and the porosity data supported the parameters used in the site model.

Wells and coreholes existing within the Area of Review (AOR) of the PTF were abandoned as required in the UIC Permit and APP. All wells and coreholes were sealed using more than the calculated volume and were perforated across lithologic intervals as required in the permits.

Once construction and equipping of the PTF was complete, a demonstration of the hydraulic capture and cone of depression was completed by injecting and recovering clean water. Hydraulic capture was demonstrated by the drawdown at each PTF recovery well exceeding the drawdown at its adjacent PTF observation well by more than 1 foot. To demonstrate the cone of depression, water level elevations were observed at the edge of the APP Pollutant Management Area (PMA) at monitoring well M54-O, a distance of approximately 500 feet from the wellfield during the recovery and injection period. The water level elevation at downgradient monitoring well M54-O was higher than the elevation at both downgradient observation wells.

Ambient mine block water quality data was collected from all PTF mine block wells and initial discharge characterization was completed at the underground workings at the site; results are summarized in this report.

Bulk electrical conductivity sensors were installed on all PTF observation wells and background electrical conductivity data was collected at the site. Statistical analysis of the data was completed and alert levels for the electrical conductivity sensors are proposed to monitor for excursion of mining solutions into the Lower Basin Fill Unit.

All PTF wellfield wells and monitoring wells associated with the PTF that were completed within the AOR were completed in accordance with the Class III well requirements. Wells located outside the AOR were completed as designed. Class III wells were drilled, constructed, and tested in accordance with the construction procedures included in the UIC Permit. The only deviations from the well design were:

- ✧ PTF Observation Well O-05. During grouting of the well, the contractor lost power to the rig and grout pump and was unable to install the grout in one continuous lift. After installation, the cement interval was evaluated and deemed to be insufficient. The well was abandoned by perforating across the compromised grout zone and replaced approximately 20 feet away. The replacement well O-05B was built in accordance with the construction procedures included in the UIC Permit.
- ✧ PTF Injection Well I-03. During development, a pipe separated and compromised the endcap of the well. No other damage was identified, but a sand-filled rubber plug was installed to approximately 1,130 feet.